



O GAGE-1

SGAGE-3 N GAGE-2

GAGE-4

GAGE-5

CAGGAGGAGGATGAGGGAGCATCTGCA CAGGAGGAGGATGAGGGAGCATCTGCA

CAGGAGGGAGGATGAGGGAGCATCTGCA

CAGGAGGGAGGATGAGGGAGCATCTGCA GGTCAAGGGCCGAAGCCTGAAGCTGATAGC

GGTCAAGGCCGAAGCCTGAAGCTC

ATAGC

GGTCAAGGGCCGAAGCCTGAAGCTGATAGC

GGTCAAGGCCGAAGCCTGAAGCT

ATAGC

CAGGAACAGGGTCACCCACAGACTGGGTGT CAGGAACAGGGTCACCCACAGACTGGGTGT CAGGAACAGGGTCACCCACAGACTGGGTGT CAGGAACAGGGTCACCCACAGACTGGGTGT

CAGGAACAGGGTCACCCACAGACTGGGTGT CAGGAACAGGGTCACCCACAGACTGGGTGT

GGTCAAGGGCCGAAGCCTGAAGCTGATAGC

GGTCAAGGGCCGAAGCCTGAAGCTGATAGC

CAGGAGGGAGGATGAGGGAGCATCTGCA CAGGAGGGAGGATGAGGGAGCATCTGCA

GAGE-6

GAGE-1 GAGE-2 GAGE-3 GAGE-4 GAGE-5 GAGE-6	GAGE-2 GAGE-3 GAGE-4 GAGE-5 GAGE-6	GAGE-1
TCTGTGTGAAATATGAGTTGGCGAGGAAGA TCTGTGTGAAATATGAGTTGGCGAGGAAGA TTCACACAGATGAATCTCAGTAGAGGAAAA TCTGTGTGAAATATGAGTTGGCGAGGAAAA TCTGTGTGAAATATGAGTTGGCGAGGAAGA TCTGTGTGAAATATGAGTTGGCGAGGAAGA TCTGTGTGAAATATGAGTTGGCGAGGAAGA	CTCATATTTCACACAGATGAGTTGGCGAGGAG	
TCGACCTATCGGCCTAGACCAAGACGC TCGACCTATCGGCCTAGACCAAGACGC TCGACCTATTATTGGCCTAGACCAAGCCGC TCGACCTATTATTGGCCTAGACCAAGCCGC TCGACCTATTATTGGCCTAGACCAAGCCGC TCGACCTATTATTGGCCTAGACCAAGCCGC	CTGTGAGGCAGTGCTGTGTGTTCCTGCCG AAGATCGACCTATTATTGGTCTAGGCCAAT CTGTGAGGCAGTGCTGTGTGTTCCTGCCG CTGTGAGGCAGTGCTGTGTGTTCCTGCCG CTGTGAGGCAGTGCTGTGTGTTCCTGCCG	CTGCCG
TCTGTGTGAAATATGAGTTGGCGAGGAAGA TCGACCTATCGGCCTAGACCAAGACGC TACGTAGAGCCTCCTGAAATGATTGGGCCT 1 TCTGTGTGAAATATGATGAGTTGGCGAGGAAGA TCGACCTATCGGCCTAGACCAAGACGC TACGTAGAGCCTCCTGAAATGATTGGGCCT 1 TTCACACACAGATGAATCTCAGTAGAGGAAAA TCGACCTATTATTGGCCTAGACCAAGCCGC TATGTACAGCCTCCTGAAATGATTGATTGGGCCT 1 TCTGTGTGAAATATGAGTTGGCGAGGAAGA TCGACCTATTATTGGCCTAGACCAAGGCGC TATGTACAGCCTCCTGAAATGATTGATTGGGCCT 1 TCTGTGTGAAATATGAAGTTGGCGAGGAAGA TCGACCTATTATTGGCCTAAGACCAAGGCGC TATGTACAGCCTCCTGAAGTGATTGGGCCT 1 TCTGTGTGAAATATGAAGTTGGCGAGGAAGA TCGACCTATTATTGGCCTAAGACCAAGGCGC TATGTACAGCCTCCTGAAGTGATTGGGCCT 1	CTCATATTTCACACAGAATGAGTTGGCGAGG CAGAGCAGTGCTGTTGTTCCTGTAGTCCTGTTTTTCCTGTAGATTCA CTCATATTTCACACAGAATGAGTTGGCGAGG AAGATCGACCTATTATTTGGTCTAGGCCAAT AATAGGTCGATCTTCCTGGCCAACTCATAT	CTGCCG TCCGGACTCTTTTTCCTCTACTGAGATTCA
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VDE 43

GAGE-2 GAGE-1 GAGE-5 GAGE-6 GAGE-3 GAGE-4 ATGCGGCCCGAGCAGTTCAGTGATGAAGTG ATGCGGCCCGAGCAGTTCAGTGATGAAGTG ATGCGGCCCGAGCAGTTCAGTGATGAAGTG ATGCGGCCCGAGCAGTTCAGTGATGAAGTG ATGCGGCCCGAGCAGTTCAGTGATGAAGTG ATGCGGCCCGAGCAGTTCAGTGATGAAGTG GAACCAGCAACACCTGAAGAAGGGGAACCA GAACCAGCAACACCTGAAGAAGGGGGAACCA GAACCAGCAACACCTGAAGAAGGGGAACCA GAACCAGCAACACCTGAAGAAGGGGGAACCA GAACCAGCAACACCTGAAGAAGGGGAACCA GAACCAGCAACACCTGAAGAAGGGGGAACCA GCAACTCAACGTCAGGATCCTGCAGCTGCT GCAACTCAACGTCAGGATCCTGCAGCTGCT GCAACTCAACGTCAGGATCCTGCAGCTGCT GCAACTCAACGTCAGGATCCTGCAGCTGCT GCAACTCAACGTCAGGATCCTGCAGCTGCT GCAACTCAACGTCAGGATCCTGCAGCTGCT

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GAGE-1 GAGE-2 GAGE-3 GAGE-4 GAGE-5 GAGE-6	O GAGE-1 Y GAGE-2 Y GAGE-3 GAGE-4 GAGE-5 GAGE-6	GAGE-1 GAGE-2 GAGE-3 GAGE-4 GAGE-5 GAGE-5	GAGE-1 GAGE-2 GAGE-3 GAGE-4 GAGE-5 GAGE-5 GAGE-6
CCTATGTTGGAAAATTCATTGAAAGTTC CCTATGTTGGAAATTTTGTTCATTAAAATTC CCTATGTTGGAAATTTTGTTCATTAAAATTC CCTATGTTGGAAATTTTGTTCATTAAAATTC CCTATGTTGGAAATTTTGTTCATTAAAATTC CCTATGTTGGAAATTTTGTTCATTAAAATTC	GGCGAGAGACCGTTTAGTTCCTATCATCTG	GTTGCCCAGACTGGGATTCTCTGGCTTTTA	GAGTGTGAAGATGGTCCTGATGGGCAGGAG GAGTGTGAAGATGGTCCTGATGGGCAGGAG GAGTGTGAAGATGGTCCTGATGGGCAGGAG GAGTGTGAAGATGGTCCTGATGGGCAGGAG GAGTGTGAAGATGGTCCTGATGGGCAGGAG GAGTGTGAAGATGGTCCTGATGGGCAGGAG GAGTGTGAAGATGGTCCTGATGGGCAGGAG
TCCCAATAAAGCTTTACAGCCTTCTGCAAA TCCCAATAAAGCTTTACAGCCTTCTGCAAA TCCCAATAAAGCTTTACAGCCTTCTGCAAA TCCCAATAAAGCTTTACAGCCTTCTGCAAA TCCCAATAAAGCTTTACAGCCTTCTGCAAA TCCCAATAAAGCTTTACAGCCTTCTGCAAA	TGGCATGTGAAGGGCAATCACAGTGTTAAAGTGAAAAGCAATCACAGTGTTAAAGTGAAAAGCAATCACAGTGTTAAAGTGAAAAGCAATCACAGTGTTAAAGTGAAAAGCAATCACAGTGTTAAAGTGAAAAGCAATCACAGTGTTAAA	ATGAACAATTGCTTCTTAAATCTTTCCCCA	ATGGACCCGCCAAATCCAGAGGAGGTGAAA ATGGACCCGCCAAATCCAGAGGAGGTGAAA ATGGACCCGCCAAATCCAGAGGAGGTGAAA ATGGACCCGCCAAATCCAGAGGAGGTGAAA ATGGACCCGCCAAATCCAGAGGAGGTGAAA ATGGACCCGCCAAATCCAGAGGAGGTGAAA
GARARARARARA 6 GARARARARARARA 5 GARARARARARARA 5 ARARARARARARA 5 GARARARARARARA 5 ARARARARARARARA 5 ARARARARARARARA 5	AGAAGACACGITGAAATGATGCAGGCTGCT 4 AGAAGACACGITGAAATGATGCAGGCTGCT 4 AGAAGGCACGITGAAATGATGCAGGCTGCT 4 AGAAGGCACGITGAAATGATGCAGGCTGCT 4 AGAAGGCACGITGAAATGATGCAGGCTGCT 4 AGAAGACACGITGAAATGATGCAGGCTGCT 4	CGGAAACCTTGAGTGACTGAAATATCAAAT 4	ACGCCTGAAGAAGACATGAGGTCTCACTAT 3 ACGCCTGAAGAAG
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CIT	

FRIDNO.

Antigenic

Peptide

RPRPRRYVEPPER

GAGE-1 GAGE-2

MS-WRGR MS-WRGR MNLSRGK

GAGE-3 GAGE-4

MS-WRG

HISH HISH HISH HISH HISH HISH

TWPRPRRYVQPPENI TWPRPRRYVQPPENI

GPMRPEQFSDEVEPATPEEGEPATQ

GPMR PEQFSDEVEPATPEEGEPATQ

INGG GOVYBBG BUNK

GPMRPEQFSDEVEPATPEEGEPATQ GPMRPEQFSDEVEPATPEEGEPATQ

GAGE-5

GAGE-1 CAGE-2 CAGE-3	DSQEQGHPQTGCECEDGPDGQEMDP PNPEEVKTPEEEMRSHYVAQTGILW LLMNNCFLMLSPRKPHSQEQGHPQTGCECEDGPDGQEMDP PNPEEVKTPEEGEKQSQC	PNPEEVKTPEEEMRSHYVAQTGILW PNPEEVKTPEEGEKQSQC PNPEEVKTPEEGEKQSQC	LLMNNCFLMLSPRKP
9 GAGE-4	LSOEOGHPOIGCECEDGPDGOEMDP PNPEEVKIPEEGEKOSOC	PNPEEVKTPEEGEKQSQC	1
30 GAGE-5	LSQEQGHPQTGCECEDGPDGQEMDP PNPEEVKTPEEGEKQSQC	PNPEEVKTPEEGEKQSQC	
3 1GAGE-6	DSQEQGHPQTGCECEDGPDGQEVDP PNPEEVKTPEEGEXQSQC	PNPEEVKTPEEGEKQSQC	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

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RQDPAAAQEGEDEGASAGQGPKPEA RQDPAAAQEGEDEGASAGQGPKPEA RQDPAAAQEGEDEGASAGQGPKPEA RQDPAAAQEGEDEGASAGQGPKPEA

RQDPAAAQEGEDEGASAGQGPKPEA

FIG. 6



